

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for screening a substance which interacts with a specific region of a biomolecule having an activity, to regulate the activity, ^{Escherichia} said biomolecule being selected from the group consisting of a protein, a nucleic acid and a sugar chain, said method comprising the following steps:

B/ (a) a step of ~~selecting a recombinant organism that interacts with the biomolecule, from preparing~~ a peptide library composed of a collection of recombinant organisms each presenting at least one of various peptides on its ~~surface~~, surface;

(b) a step of bringing the recombinant organisms of the peptide library into contact with the biomolecule;

(c) a step of selecting a recombinant organism that interacts with the biomolecule from the peptide library, with a proviso that the interaction is not an antigen-antibody reaction; and

(d) a step of testing inhibitory effect of a substance, on an interaction between the selected recombinant organism and the biomolecule, wherein said substance is selected from a chemical compound library; and

(~~b~~) (e) a step of selecting a substance inhibiting the interaction between the selected recombinant organism ~~or a peptide presented by the recombinant organism~~ and the biomolecule, as the substance which interacts with the specific region of the biomolecule.

2. (Canceled)

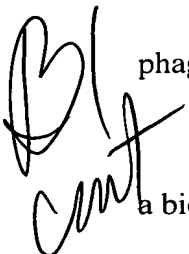
3. (Currently amended) The method according to Claim 1, wherein the peptide library is ~~composed of~~ a random peptide-presenting phage library.

4. (Currently amended) The method according to Claim 1, wherein the peptide library is ~~composed of~~ a random peptide-presenting Escherichia coli library.

5. (Original) The method according to Claim 1, wherein the peptides each have a length of 3 to 15 residues.

6. (Currently amended) The method according to claim 1, wherein the selected recombinant organism ~~or the peptide presented by the recombinant organism~~ is labeled with a labeling substance.

7. (New) The method according to Claim 1, wherein said recombinant organisms are phages or *Escherichia coli* cells.

 8. (New) A method for screening a substance which interacts with a specific region of a biomolecule having an activity, to regulate the activity, said biomolecule being selected from the group consisting of a protein, a nucleic acid and a sugar chain, said method comprising the following steps:

(a) a step of constructing a peptide library composed of a collection of recombinant organisms each presenting at least one of various peptides on its surface;

(b) a step of bringing the recombinant organisms of the, peptide library into contact with the biomolecule;

(c) a step of selecting a recombinant organism that interacts with the biomolecule from the peptide library, with a proviso that the interaction is not an antigen-antibody reaction;

(d) a step of determining a peptide presented by the selected recombinant organism and preparing the peptide;

(e) a step of testing inhibitory effect of a substance, on an interaction between the peptide and the biomolecule, wherein said substance is selected from a chemical compound library; and

(f) a step of selecting a substance inhibiting the interaction between the peptide and the biomolecule, as the substance which interacts with the specific region of the biomolecule.

9. (New) The method according to Claim 8, wherein the peptide library is a random peptide-presenting phage library.

10. (New) The method according to Claim 8, wherein the peptide library is a random peptide-presenting *Escherichia coli* library.

11. (New) The method according to claim 8, wherein the peptides each have a length of 3 to 15 residues.

12. (New) The method according to claim 8, wherein the peptide presented by the recombinant organism is labeled with a labeling substance.

13. (New) The method according to Claim 8, wherein the peptide prepared in the step (d) is labeled with a labeling substance.

14. (New) The method according to Claim 8, wherein said recombinant organisms are phages or *Escherichia coli* cells.

SUPPORT FOR THE AMENDMENTS

Claims 1, 3, 4, and 6 have been amended.

Claim 2 has been canceled.

Claims 7-14 have been added.

Original Claim 1, page 14, lines 5-8, and page 21, line 17-page 22, line 9 supports the amendment of Claim 1. New Claims 7-14 are supported by original Claims 1-6 and, generally, by pages 4-51 of the specification.

No new matter has been added.